

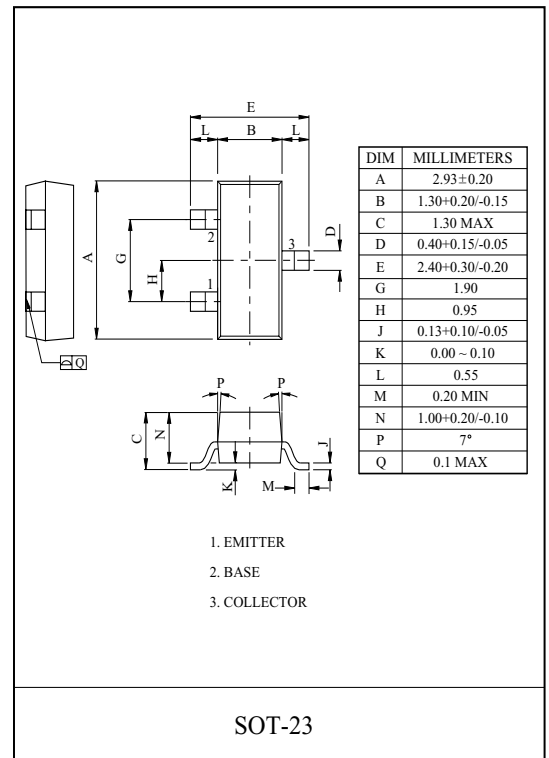
AUDIO MUTING APPLICATION.

FEATURES

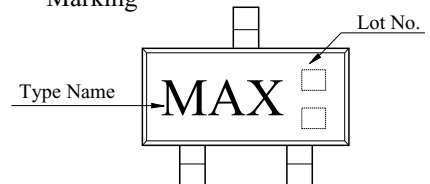
- High Emitter-Base Voltage : $V_{EBO}=12V(\text{Min.})$.
- High Reverse h_{FE}
: Reverse $h_{FE}=20(\text{Min.})$ ($V_{CE}=2V, I_C=4mA$).
- Low on Resistance : $R_{ON}=0.6$ (Max.) ($I_B=1mA$).

MAXIMUM RATING ($T_a=25$)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|---------|------|
| Collector-Base Voltage | V_{CBO} | 25 | V |
| Collector-Emitter Voltage | V_{CEO} | 20 | V |
| Emitter-Base Voltage | V_{EBO} | 12 | V |
| Collector Current | I_C | 300 | mA |
| Base Current | I_B | 30 | mA |
| Collector Power Dissipation | P_C | 200 | mW |
| Junction Temperature | T_j | 150 | |
| Storage Temperature Range | T_{stg} | -55 150 | |



Marking



ELECTRICAL CHARACTERISTICS ($T_a=25$)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|-----------------|--------------------------------|------|------|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB}=25V, I_E=0$ | - | - | 0.1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=12V, I_C=0$ | - | - | 0.1 | μA |
| DC Current Gain | h_{FE1} (FOR) | $V_{CE}=2V, I_C=4mA$ | 200 | - | 800 | |
| | h_{FE2} (REV) | $V_{CE}=2V, I_C=4mA$ | 20 | - | - | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=100mA, I_B=10mA$ | - | - | 0.25 | V |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C=100mA, I_B=10mA$ | - | - | 1 | V |
| Transition Frequency | f_T | $V_{CE}=10V, I_C=1mA$ | - | 60 | - | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB}=10V, I_E=0, f=1MHz$ | - | 10 | - | pF |
| On Resistance | R_{on} | $f=1KHz, I_B=1mA, V_{in}=0.3V$ | - | 0.6 | - | |

KTD1304

